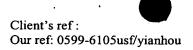
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What is claimed is:

- 1 1. A method of interactive image retrieval based on user-
- 2 specified regions, comprising:
- 3 providing a sample image;
- 4 dividing the sample image into a plurality of regions;
- 5 selecting one or more sample regions for feature extraction,
- 6 and defining corresponding logic operators; and
- 7 constructing a composite query instruction based on the
- 8 selected sample regions and their corresponding logic
- 9 operators and searching the image database according to the
- 10 composite query instruction.
- 1 2. The method as claimed in claim 1, comprising selecting the
- 2 images that contain the regions corresponding with the
- 3 composite query instruction.
- 1 3. The method as claimed in claim 1, wherein the step of
- 2 dividing the sample image into a plurality of regions uses a
- 3 edge detection method to divide the sample image into a
- 4 plurality of regions.
- 1 4. The method as claimed in claim 1, wherein the step of
- 2 dividing the sample image into a plurality of regions uses a
- 3 color quantization method to divide the sample image into a
- 4 plurality of regions.
- 1 5. The method as claimed in claim 1, wherein the step of

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- 2 dividing the sample image into a plurality of regions uses a
- 3 region splitting and merging method to divide the sample image
- 4 into a plurality of regions.
- 1 6. The method as claimed in claim 1, wherein the step of
- 2 dividing the sample image into a plurality of regions uses a
- 3 region growing method to divide the sample image into a
- 4 plurality of regions.
- 1 7. The method as claimed in claim 1, wherein the image features
- 2 include color distribution, texture, position and shape.
- 1 8. The method as claimed in claim 1, wherein the image features
- 2 include tone, brightness and chromatic saturation.
- 1 9. The method as claimed in claim 1, wherein the logic operators
- 2 include "and", "or", "exclusive-or" and "not".
- 1 10. A method of interactive image retrieval based on user-
- 2 specified regions, comprising:
- 3 providing a sample image;
- 4 selecting one or more sample regions from the sample image
- 5 by a region selection tool and defining corresponding logic
- 6 operators between the selected regions;
- 7 extracting the image features of the selected sample
- 8 regions; and
- 9 constructing a composite query instruction based on the



- 10 selected sample regions and their corresponding logic
- 11 operators and searching the image database according to the
- 12 composite query instruction.
- 1 11. The method as claimed in claim 10, comprising selecting
- 2 the images that contain the regions corresponding with the
- 3 composite query instruction.
- 1 12. The method as claimed in claim 10, wherein the image
- 2 features include color distribution, texture, position and
- 3 shape.
- 1 13. The method as claimed in claim 10, wherein the image
- 2 features include tone, brightness and chromatic saturation.
- 1 14. The method as claimed in claim 10, wherein the logic
- 2 operators include "and", "or", "exclusive-or" and "not".